

What is claimed is:

- 1 1. A network communication electronic commerce system for the secure
2 online purchase of goods and services from a plurality of merchant
3 vendors by a plurality of buyer members comprising a buyer member
4 processor for each buyer member to selectively purchase goods and
5 services upon a request to any of the merchant vendors through a debit
6 account associated with a discrete e-mail address, a merchant vendor
7 processor for each merchant vendor to selectively provide such goods and
8 services upon receipt of a purchase request and validation of the debit
9 account balance of any requesting buyer members and a purchase
10 authorization processor to maintain and validate the debit account of
11 requesting buyer members and to authorize payment to merchant vendors
12 for goods and services purchased through said network communication
13 electronic commerce system.
- 1 2. The network communication electronic commerce system of Claim 1
2 wherein said buyer member processor comprises means to selectively
3 order or request goods and services from a merchant vendor through said
4 merchant vendor processor and to communicate with the purchase
5 authorization processor to maintain and access the buyer member
6 account.
- 1 3. The network communication electronic commerce system of Claim 2
2 wherein said merchant vendor processor comprises a means to receive
3 purchase requests from a buyer member processor and to generate and

transmit validation/authentication inquiries upon receipt of purchase requests to said purchase authorization processor and to receive discrete buyer member authorization message in response thereto and to fill purchase requests upon receipt of the corresponding discrete buyer member authorization message and receive payment therefore.

4. The network communication electronic commerce system of Claim 3 wherein said purchase authorization processor comprises means including an online buyer member account balance data section to maintain current account balances for each buyer member and to selectively generate discrete buyer member authorization messages fed to said merchant vendor processor when the account balance of a requesting buyer member is sufficient to cover the goods or services requested and to notify said buyer member processor of the purchase authorization; an online buyer member transaction section to receive credit/deposit transactions from individual buyer member processors and credit the corresponding current account balance in the buyer member account balance data section, to receive purchase transaction data including goods and services purchased together with corresponding prices and merchant vendor information from said buyer member account balance data section and to transfer the credit/deposit transaction and purchasing transaction data to an off line buyer member data section to maintain individual buyer member credit/deposit and purchase histories, and to effect merchant vendor payments to merchant vendors through said corresponding merchant vendor processor upon receipt of a discrete buyer member

20 authorization from said buyer member account balance data section on
21 online buyer member transaction section.

1 5. The network communication electronic commerce system of Claim 1
2 wherein said merchant vendor processor comprises a means to receive
3 purchase requests from a buyer member processor and to generate and
4 transmit validation/authentication inquiries upon receipt of purchase
5 requests to said purchase authorization processor and to receive discrete
6 buyer member authorization message in response thereto and to fill
7 purchase requests upon receipt of the corresponding discrete buyer
8 member authorization message and receive payment therefore.

1 6. The network communication electronic commerce system of Claim 5
2 wherein said purchase authorization processor comprises means including
3 an online buyer member account balance data section to maintain current
4 account balances for each buyer member and to selectively generate
5 discrete buyer member authorization messages fed to said merchant
6 vendor processor when the account balance of a requesting buyer
7 member is sufficient to cover the goods or services requested and to notify
8 said buyer member processor of the purchase authorization; an online
9 buyer member transaction section to receive credit/deposit transactions
10 from individual buyer member processors and credit the corresponding
11 current account balance in the buyer member account balance data
12 section, to receive purchase transaction data including goods and services
13 purchased together with corresponding prices and merchant vendor
14 information from said buyer member account balance data section and to

15 transfer the credit/deposit transaction and purchasing transaction data to
 16 an off line buyer member data section to maintain individual buyer
 17 member credit/deposit and purchase histories, and to effect merchant
 18 vendor payments to merchant vendors through said corresponding
 19 merchant vendor processor upon receipt of a discrete buyer member
 20 authorization from said buyer member account balance data section on
 21 online buyer member transaction section.

1 7. The network communication electronic commerce system of Claim 1
 2 wherein said purchase authorization processor comprises means including
 3 an online buyer member account balance data section to maintain current
 4 account balances for each buyer member and to selectively generate
 5 discrete buyer member authorization messages fed to said merchant
 6 vendor processor when the account balance of a requesting buyer
 7 member is sufficient to cover the goods or services requested and to notify
 8 said buyer member processor of the purchase authorization; an online
 9 buyer member transaction section to receive credit/deposit transactions
 10 from individual buyer member processors and credit the corresponding
 11 current account balance n the buyer member account balance data
 12 section, to receive purchase transaction data including goods and services
 13 purchased together with corresponding prices and merchant vendor
 14 information from said buyer member account balance data section and to
 15 transfer the credit/deposit transaction and purchasing transaction data to
 16 an off line buyer member data section to maintain individual buyer
 17 member credit/deposit and purchase histories, and to effect merchant

18 vendor payments to merchant vendors through said corresponding
 19 merchant vendor processor upon receipt of a discrete buyer member
 20 authorization from said buyer member account balance data section on
 21 online buyer member transaction section.

1 8. The network communication electronic commerce system of Claim 7
 2 wherein said buyer member processor comprises means to selectively
 3 order or request goods and services from a merchant vendor through said
 4 merchant vendor processor and to communicate with the purchase
 5 authorization processor to maintain and access the buyer member
 6 account.

1 9. The network communication electronic commerce system of Claim 1
 2 wherein said purchase authorization is implemented through a central
 3 function through a central clearing organization to authorize the merchant
 4 vendor having a corresponding merchant vendor processor to sell goods
 5 and services to requesting buyer members.

1 10. The network communication electronic commerce system of Claim 9
 2 wherein each buyer member establishes a debit account by depositing an
 3 amount with the central clearing organization.

1 11. The network communication electronic commerce system of Claim 10
 2 wherein the deposit is made online through the buyer member processor.

1 12. The network communication electronic commerce system of Claim 1
 2 further comprises means to create a buyer member account, assign a
 3 unique e-mail address for each buyer member account with the deposit

4 and all subsequent online communications regarding any particular buyer
5 member is associated only with unique e-mail address.

1 13. The network communication electronic commerce system of Claim 10
2 wherein the deposit is made to the central clearing organization.

1 14. The network communication electronic commerce system of Claim 13
2 wherein the central clearing organization creates a buyer member account,
3 assigns a unique e-mail address for each buyer member account with the
4 deposit and all subsequent online communications regarding any particular
5 buyer member is associated only with unique e-mail address assign.

1 15. The network communication electronic commerce system of Claim 9
2 wherein the central clearing organization creates a buyer member account,
3 assigns a unique e-mail address for each buyer member account with the
4 deposit and all subsequent online communications regarding any particular
5 buyer member is associated only with unique e-mail address assign.

1 16. The network communication electronic commerce system of Claim 3
2 wherein said purchase authorization processor comprises means including
3 an online buyer member account balance data section to maintain current
4 account balances for each buyer member and to selectively generate
5 discrete buyer member authorization messages fed to said merchant
6 vendor processor when the account balance of a requesting buyer
7 member is sufficient to cover the goods or services requested and to notify
8 said buyer member processor of the purchase authorization; an online
9 buyer member transaction section to receive credit/deposit transactions

10 from individual buyer member processors and credit the corresponding
 11 current account balance n the buyer member account balance data
 12 section, to receive purchase transaction data including goods and services
 13 purchased together with corresponding prices and merchant vendor
 14 information from said buyer member account balance data section and to
 15 transfer the credit/deposit transaction and purchasing transaction data to
 16 an off line buyer member data section to maintain individual buyer
 17 member credit/deposit and purchase histories, and to effect merchant
 18 vendor payments to merchant vendors through said corresponding
 19 merchant vendor processor upon receipt of a discrete buyer member
 20 authorization from said buyer member account balance data section on
 21 online buyer member transaction section and further comprises a central
 22 clearing organization operating said purchase authorization to authorize
 23 the merchant vendor having a corresponding merchant vendor processor
 24 to sell goods and services to any of the buyer members.

1 17. The network communication electronic commerce system of Claim 16
 2 wherein a buyer member selects a desired product or service from a
 3 merchant vendor on said buyer member processor which transmits a
 4 purchase request to the merchant vendor processor, merchant vendor
 5 processor inquires of said buyer member account balance data section of
 6 the purchase authorization processor to determine if the buyer member
 7 has sufficient funds on account with said central clearing organization to
 8 pay for the desired goods or services and to generate and transmit a

- 9 purchase authorization to the inquiring merchant vendor processor when
10 sufficient funds exist.
- 1 18. The network communication electronic commerce system of Claim 17
2 wherein said purchase authorization processor includes an off-line buyer
3 data base to receive the debit and notifies the buyer member processor of
4 the purchase authorization and debits the buyer member account.
- 1 19. The network communication electronic commerce system of Claim 18
2 wherein the off-line buyer member data base includes means to determine
3 the specific amount to be paid each merchant vendor for each product or
4 service purchased by buyer members after deducting a clearing charge for
5 the corresponding purchase.
- 1 20. The network communication electronic commerce system of Claim 19
2 wherein the off-line buyer member data base purchase authorization
3 processor includes memory to maintain both account and purchase
4 histories of each buyer member off line to further protect purchasing
5 habits and account funds of the buyer member.
- 1 21. The network communication electronic commerce system of Claim 18
2 wherein the off-line buyer member data base purchase authorization
3 processor includes memory to maintain both account and purchase
4 histories of each buyer member off line to further protect purchasing
5 habits and account funds of the buyer member.

- 6 22. The network communication electronic commerce system of Claim 17
7 wherein said purchase authorization processor transmits payment directly
8 to said merchant vendor processor of the participating member vendor.

- 1 23. The network communication electronic commerce system of Claim 17
2 wherein said purchase authorization processor transmits payment directly
3 to said merchant vendor processor of the participating member vendor
4 through a depository.

- 1 24. The network communication electronic commerce system of Claim 17
2 wherein if the account balance is insufficient to pay for a particular
3 purchase request, both the merchant vendor and buyer member are
4 notified by the central clearing organization as the buyer member account
5 balance data of the purchase authorization processor generates and
6 transmits a declination message to said merchant vendor processor and
7 said buyer member processor.